

REMARKS

Review and reconsideration on the merits are requested.

Applicants acknowledge the Examiner's withdrawal of the rejection under 35 U.S.C. §102.

Claims 1-3, 5-13, 16-18, 20-22, and 24-25 have been rejected under 35 U.S.C. §103 as obvious over Tarumi et al. in view of Jonas et al. In response, Applicants traverse the rejection.

The Examiner states that the motivation for combining the references lies in the fact that both references teach electrophotographic or xerographic components. Applicants respectfully dispute this argument and submit that layers for one xerographic component are not necessarily likely to work well as layers for another xerographic component due to the diverse requirements of all of the many xerographic components. Further, layers useful in xerographic components are distinct from layers useful in photographic arts due to the differences in the components and the chemistry involved in the two arts.

As set forth in the previous Amendment, Tarumi et al. teaches an intermediate transfer roller. Tarumi et al. does not teach or suggest use of the claimed polymer substrate in combination with a thiophene-based coating material as claimed. Jonas et al. is relied upon as teaching a thiophene-based material.

Tarumi et al. teaches an intermediate transfer member and does not teach a polythiophene layer, whereas Jonas et al. relates to conductive polythiophene formulations for electrodes in electroluminescent displays or for solid capacitors, and for picture production such as silver halide photography dry-plate systems in electrophotography. Applicants submit that one of ordinary skill in the art would not have been motivated to combine layers from an intermediate transfer member (Tarumi et al.) with a coating taught as useful in photography, solid capacitors, or electroluminescent displays (Jonas et al.).

An intermediate transfer member as taught by Tarumi et al., is used for the purpose of transferring a toner and/or developer image from an imaging member to another transfer member or to a copy substrate. The outer layers of the intermediate transfer member are required to possess qualities that allow transfer of a developed image. An electrode is used for the purpose of transferring electrical capacity from one place to another. One of ordinary skill would not have been motivated to combine layers taught as useful in an intermediate transfer member (Tarumi et al.) with layers taught as useful in electrodes (Jonas et al.).

Further, toner and/or developer are comprised of completely different materials as compared to photographic materials such as silver halide materials. Applicants submit that one of ordinary skill would not have been motivated to use materials taught as compatible with toner and/or developer (Tamari et al.) with materials taught as useful in photography (Jonas et al.). The chemistry used in transferring an image in xerography is completely distinguishable from the chemistry used in developing a photograph.

Further, there would not have been any expectation of success that layers useful as electrodes or photography would work well as layers in an intermediate transfer member.

Therefore, because of the diverse teachings of the art, Applicants submit that one of ordinary skill in the art would not have been motivated to combine the references cited. Accordingly, Applicants submit that the rejected claims are not obvious in view of the cited references and request withdrawal of the rejection of claims 1-3, 5-13, 16-18, 20-22, and 24-25 under 35 U.S.C. §103 as obvious over Tarumi et al. in view of Jonas et al.

Claims 4, 19 and 23 have been rejected under 35 U.S.C. §103 as obvious over Tarumi et al. in view of Jonas et al. and Newkirk. In response, Applicants traverse the rejection.

Because the rejected claims ultimately rely on claim 1, Applicants repeat the above arguments as to why claim 1 is not obvious in view of the combination of Tarumi et al. in view of Jonas et al. Applicants submit that the next leap of

combining the tertiary reference of Newkirk with the first two references would not have been made except possibly in hindsight.

Newkirk teaches fuser coatings. Applicants submit that one of ordinary skill in the art would not have been motivated to combine these three references because of their diverse teachings. Specifically, Jonas et al. relates to thiophene-based materials useful for coating electrodes in the electrical arts and for use in picture production. Tarumi et al. relates to intermediate transfer member coatings. Newkirk relates to fuser member coatings. One of ordinary skill in the art would not have been motivated to use as a substrate, an intermediate coating of an intermediate transfer member as taught by Tarumi et al., and substitute a specific fluoroelastomer of a fuser member for that coating, and subsequently coat the fluoroelastomer with a thiophene-based material taught as useful as a coating in the electrical arts and for picture making as taught by Jonas et al. To make such changes to each of the references and end up with the claimed invention could only be achieved in hindsight.

The Examiner states that Applicant failed to provide convincing arguments that the function of the intermediate layer in the roller of Tarumi et al. is not the same as that of the one in the roller of Newkirk. Applicants do not have to provide arguments that the layers of the two members are different in order to show nonobviousness. Applicants need only show that there would have been no motivation to combine the teachings of the references. Applicants provide the following comments on why fuser members are different from intermediate transfer members, and why one of ordinary skill in the art would not have been motivated to combine such diverse references.

Fuser members are used in xerographic arts to transfer and fuse a developed image to a copy substrate. Because fusing or fixing is involved, heat is associated with a fuser member. Therefore, the fuser member coatings are required to possess sufficient thermal conductivity. In particular, the intermediate layers must possess sufficient thermal conductivity to allow for heat to transfer from an internal heat source to the outer layer of the fuser member. Intermediate transfer members, as

taught by Tarumi et al., do not have heat associated with them, and are used for the purpose of transfer only, and not fusing. Thermal conductivity is not a requirement of the coatings useful as intermediate transfer member coatings. There are many other differences between fuser members and intermediate transfer members that make it unpredictable to determine whether layers that work well in one component would work well in the other. Therefore, Applicants submit that one of ordinary skill would not have been motivated to combine the references with such distinguishing teachings. Further, there would not have been any expectation of success that a layer useful in fusing a developed image to a copy substrate, would be successful as a layer for use in an intermediate transfer member.

In view of the above arguments, Applicants submit that the present claims are not obvious in view of the references, and request withdrawal of the rejection of claims 4, 19 and 23 under 35 U.S.C. § 103(a) as obvious over Tarumi et al. in view of Jonas et al. and Newkirk.

Claim 4 has been rejected under 35 U.S.C. § 103(a) as obvious over Tarumi et al. in view of Jonas et al. and Chen et al. In response, Applicants traverse the rejection.

Tarumi et al. and Jonas et al. have been discussed above. Because claim 4 depends ultimately from claim 1, Applicants repeat the above arguments over Tarumi et al. in view of Jonas et al. Applicants further submit that Chen et al. does not provide the deficiencies of the primary and secondary references, in that Chen et al. does not provide motivation for combining a fluoropolymer layer as taught by Tarumi et al. with a thiophene coating as taught by Jonas et al. In addition, Applicants submit that one of ordinary skill in the art would not have been motivated to combine the three references. However, assuming that the references were combinable, Applicants submit that the combination would not result in the claimed invention.

To begin with, one of ordinary skill in the art would not have been motivated to combine a layer taught for use in an intermediate transfer member as taught by Tarumi et al. with a coating taught by Jonas et al. as a coating for electrodes and for

use in picture production, and substitute the fluoropolymer layer of Tarumi et al. with the specific fluoroelastomers as taught by Chen et al. as a layer for use in fuser members. Applicants submit that one of ordinary skill in the art would not have been motivated to combine such diverse references relating to fuser members (Chen et al.), intermediate transfer members (Tarumi et al.), and electrodes in picture production (Jonas et al.). Applicants repeat the above arguments as to why fuser member layers are uniquely designed and suited for fuser members, due to the need for thermal conductivity.

In addition, Applicants submit that even if the references were combined, the resulting invention would not be close to the elements of the claimed invention. Instead, the resulting invention would be an intermediate fluoroelastomer layer as taught by Chen et al. and Tarumi et al., instead of the claimed fluoropolymer substrate.

The Examiner again states that Applicants have not provided convincing arguments that the function of the intermediate layer in the roller of Tarumi et al. is not the same as that of the base cushion layer in the roller of Newkirk. However, Applicants need only show that there is no motivation to combine the layers. In addition, Applicants are confused as to why the Examiner refers to Newkirk in this rejection, when the rejection is over Tarumi et al. in view of Jonas et al. and Chen et al.

In view of the above arguments, Applicants submit that claim 4 is not obvious in view of the three references. Accordingly, Applicants request withdrawal of the rejection of claim 4 under 35 U.S.C. § 103(a) as obvious over Tarumi et al. in view of Jonas et al. and Chen et al.

Claims 14 and 15 have been rejected under 35 U.S.C. § 103(a) as obvious over Tarumi et al. in view of Krafft et al. In response, Applicants traverse the rejection.

Claims 14-15 ultimately depend from claim 1 which includes the recitation of a substrate comprising a polymer selected from the group recited in amended claim 1. Applicants submit that Krafft et al. does not teach or suggest the deficiencies of

the primary reference, in that Krafft et al. does not teach or suggest the claimed substrate. Again, neither reference teaches or suggests the claimed substrate.

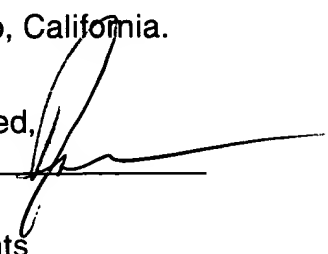
The Examiner states that Krafft et al. teaches that polythiophenes have advantages. However, Krafft et al. does not provide any motivation to substitute the coating of Tarumi et al. with a thiophene-based coating as claimed. Krafft et al. teaches photographic materials. As set forth above, photographic chemistry is distinct from xerographic chemistry. Even if Krafft et al. did provide motivation, the resulting invention of the combination would not include the claimed substrate material.

In view of the above arguments, Applicants submit that all claims should now be in condition for allowance. Early indication of allowability is respectfully requested.

No additional fee is believed to be required for this amendment. However, the undersigned Xerox Corporation Attorney hereby authorizes the charging of any necessary fees, other than the issue fee, to Xerox Corporation Deposit Account No. 24-0025. This also constitutes a request for any needed extension of time and authorization to charge all fees therefor to Xerox Corporation Deposit Account No. 24-0025.

In the event the Examiner considers personal contact advantageous to the disposition of this case, s/he is hereby authorized to call Applicant's Attorney, Annette L. Bade, at telephone number (310) 333-3682, El Segundo, California.

Respectfully submitted,


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